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| 10/750,065      | 12/30/2003  | Vladimir Savchenko   | 6570P061            | 9111             |

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BLAKELY SOKOLOFF TAYLOR & ZAFMAN  
1279 OAKMEAD PARKWAY  
SUNNYVALE, CA 94085-4040

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| EXAMINER |
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PANTOLIANO JR, RICHARD

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| ART UNIT | PAPER NUMBER |
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2194

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12/11/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/750,065

Applicant(s)

SAVCHENKO ET AL.

Examiner

Richard Pantoliano Jr

Art Unit

2194

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

WILLIAM THOMSON  
SUPERVISORY PATENT EXAMINER

### DETAILED ACTION

1. This Office Action is filed in response to amendments received on **01 October 2007** in regard to Application# **10/750,056**. **Claims 1-37** are currently pending and have been considered below.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-10, 17-30, and 33-35** are rejected under 35 U.S.C. 103(a) as being unpatentable over Harvey et al (US PG Pub: 2004/0205104), hereinafter Harvey, in view Newcomer (Newcomer, Eric. Understanding Web Services: XML, WSDL, SOAP and UDDI. Indianapolis, IN: Pearson Education, Inc. 2002.).

4. As to **Claim 1**, Harvey discloses the invention substantially as claimed including a computer-implemented method comprising:

a) defining a virtual interface that selectively exposes methods and parameters of a specific Web service implementation to provide an interface for the specific Web service implementation (para. [0065], [0088], [0145], [0277]) (The "UDDI servers" contain the definitions for connecting to a web service. The stored "tModels" allow control of specific implementations of a web service by particular users, thereby meeting this claim limitation);

b) creating a Web service definition generically defining features and properties of the Web service to specify a behavior of the defined virtual interface, the generically defined features and properties mapped to runtime technical features in the specific Web service implementation (para. [0076]) (Since the information contained within a UDDI registry contains information as to how to access a service and not how that service is implemented, all information accessible to a user via a UDDI registry is a generic representation of the actual implementation of the service, thereby meeting the claim limitation; and

c) providing a Web service archive including the virtual interface and the Web service definition (para. [0088]) (The “UDDI servers” meet this claim limitation).

5. Harvey does not explicitly teach wherein multiple views are provided for the interface.

6. Newcomer teaches wherein a UDDI server is capable of, in the public interface to the Web service office, allowing for multiple different implementations of a service to be selected by a user (pg. 162, fig. 5-2; pg. 168, para. 1-4) (A business entity can have multiple “tModels” for the same “businessService” being offered, thereby offering many different implementations of the same service to be accessed.)

7. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Harvey in view of Newcomer. One would have been motivated by Harvey’s explicitly stated effort to allow particular users access to only those “tModels” to which they are authorized, thereby enforcing whatever business model is in place for the services being offered.

8. As to **Claim 2**, Harvey further teaches wherein defining the virtual interface comprises indicating an operation of the Web service implementation to be exposed by the virtual interface (para. [0071]) (The “UDDI registry” contains the information describing what services can be accessed).
9. As to **Claim 3**, Harvey further teaches wherein defining the virtual interface comprises providing a name for the operation to be exposed by the virtual interface (para. [0016], [0029], [0060], and [0063]).
10. As to **Claim 4**, Harvey further teaches wherein the operation includes a parameter to provide a value for the operation and; wherein defining the virtual interface comprises altering a characteristic of the parameter (para. [0112]-[0120]).
11. As to **Claim 5**, wherein altering the characteristic of the parameter includes at least one of:
  - a) providing a name for the parameter (para. [0112]-[0120]);
  - b) providing a default value for the parameter (para. [0126] – [0130]).
12. As to **Claim 6**, Harvey further teaches defining a second virtual interface to provide a second interface for the Web service implementation (para. [0121]-[0123], and [0172]-[0178]) (The use of “aliases” meet this claim limitation).

13. As to **Claim 7**, Harvey further teaches wherein creating the Web service definition to specify a behavior of the defined virtual interface comprises providing a name for the Web service definition (para. [0126]-[0136], Fig. 7, and Fig. 11) (The name of the service being accessed is mapped to the structure of the LDAP/x.500 directory using the submitted name, thereby meeting the claim limitation).

14. As to **Claim 8**, Harvey further teaches wherein creating the Web service definition to specify a behavior of the defined virtual interface comprises specifying an authentication level for the Web service definition (para. [0106]-[0108]) (Users are given access to only the sub-tree of services associated with the accessed service).

15. As to **Claim 9**, Harvey further teaches wherein creating the Web service definition to specify a behavior of the defined virtual interface comprises specifying a transport guarantee type for the Web service definition (para. [0084], [0121]) (Aliases are used to offer a guarantee of data integrity when used in a distributed system, thereby meeting the claim limitation).

16. As to **Claim 10**, Harvey further teaches wherein creating the Web service definition to specify a behavior of the defined virtual interface comprises indicating an authorization level for the Web service definition (para. [0073]-[0077]).

17. As to **Claims 17-27**, being directed to the application server implementing the method of **Claims 1-10**, these claims are rejected for the same reasoning as applied to **Claims 1-10**.

18. As for **Claims 28-30**, being directed to the system implementing the method of **Claims 1, 2 and 8**, these claims are rejected for the same reasoning as applied to **Claims 1, 2, and 8**.

19. As to **Claims 33-35**, being directed to the article of manufacture containing a medium with instructions implementing the method of **Claims 1, 2 and 8**, these claims are rejected for the same reasoning as applied to **Claims 1, 2, and 8**.

20. **Claims 11-16, 31, 32, 36, and 37** are rejected under 35 U.S.C. 103(a) as being unpatentable over Harvey in view of Newcomer and further in view of the BEA WebLogic Server 6.1, hereinafter BEA, as described by "Web Applications Basics" (BEA Systems Website. "Web Applications Basics". Accessed 21 June 2007. Published 2001), hereinafter BEA1 and "web.xml Deployment Descriptor Elements" (BEA Systems Website. "web.xml Deployment Descriptor Elements". Accessed 21 June 2007. Published 2001), hereinafter BEA2.

21. As to **Claim 11**, Harvey and Newcomer disclose the method of **Claim 1**, but do not explicitly teach creating a Web service deployment descriptor to describe a configuration of the Web service definition.

22. BEA explicitly teaches creating a Web service deployment descriptor to describe a configuration of the Web service definition (BEA1; para. 1).

23. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the method disclosed by Harvey with the teachings of BEA. One would have been motivated by the fact that using a deployment descriptor to implement a web services platform is a standard component of the Java J2EE specification for developing web services (BEA1; para. 1). Since the use of the J2EE architecture was well known at the time of invention, one would reasonably see it as an option for implementing the method disclosed by Harvey.

24. As to **Claim 12**, Harvey in view of BEA further teaches wherein providing the Web service archive comprises providing a Web service archive including the virtual interface, the Web service definition, and the Web service deployment descriptor (BEA1; pg. 1, para. 1).

25. As to **Claim 13**, Harvey in view of BEA further teaches wherein creating the Web service deployment descriptor to describe a configuration of the Web service comprises specifying a name for the configuration of the Web service definition described, at least in part, by the Web service deployment descriptor (BEA2; pg. 6-7) (The "servlet"



element meets this claim limitation).

26. As to **Claim 14**, Harvey in view of BEA further teaches wherein creating the Web service deployment descriptor comprises specifying a transport binding for the configuration of the Web service (Harvey; para. [0285]).

27. As to **Claim 15**, Harvey in view of BEA further teaches wherein creating the Web service deployment descriptor comprises specifying an authentication protocol implementation for the configuration of the Web service (Harvey; para. [0285]).

28. As to **Claim 16**, wherein creating the Web service deployment descriptor comprises providing an address for the configuration of the Web service (BEA2; pg. 6 and pg. 9) (The “filter mapping” and “servlet mapping” elements meet this claim limitation).

29. As to **Claims 31 and 32**, being directed to the system implementing the method of **Claims 11 and 14**, these claims are rejected for the same reasoning as applied to **Claims 11 and 14**.

30. As to **Claims 36 and 37**, being directed to the article of manufacture containing a medium with instructions implementing the method of **Claims 11 and 14**, these claims are rejected for the same reasoning as applied to **Claims 11 and 14**.

***Response to Arguments***

31. Applicant's arguments with respect to **Claims 1-37** have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

32. The prior art made of record on the P.T.O. 892 that has not relied upon is considered pertinent to applicant's disclosure. Careful consideration of the cited art is required prior to responding to this Office Action, see 37 C.F.R. 1.111(c).

33. Examiner has cited particular columns and line numbers and/or figures in the references as applied to the claims. Applicant is reminded that rejections are based on references as a whole and not just the cited passages. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the cited art or disclosed by the examiner.

34. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Pantoliano Jr whose telephone number is (571) 270-1049 and whose direct fax number is (571) 270-2049. The examiner can normally be reached on Monday-Thursday, 8am - 4 pm EST. Please note that a request for an interview in regard to the present application should be accompanied by a written agenda (including proposed amendments, if available, and specific issues to be discussed) sent to the fax number cited above.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571)272-3718. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RP  
12/09/2007

  
WILLIAM THOMSON  
SUPERVISORY PATENT EXAMINER